

EPA Comments on  
Proposed Plan Approval 23-0012C  
For Braskem America, Inc.

This proposed plan approval is to increase the total polypropylene production rate from plants 1 and 2 at Braskem America, located in Marcus Hook, Pennsylvania, from 455,900 tpy to 595,680 tpy. The facility is a major VOC NNSR source.

Significant comments are highlighted.

1. NNSR Analysis

- a. Step One to the NNSR applicability determination must be delineated. Baseline actual VOC emissions for all affected units must be included and an explanation of the basis for those emissions (CEMs, bases for any emissions factors used, etc.); The Baseline Period must be clear. (January 2014 through December 2015?)
- b. The proposed throughput limit of 595,680,000 pounds per year for each plant would establish potential to emit (PTE) for VOC emissions. If PTE is used [and not projected actual emissions (PAE)], no emissions may be excluded in the analysis.
- c. Please provide the calculations used that show the VOC emissions associated with the new PTE limits.
- d. Please show how the VOC increase from the project is determined, i.e., PTE minus Baseline Actual Emissions (BAE). Without this information, the NNSR analysis is incomplete and the submission to EPA is incomplete.

2. PSD Analysis

- a. Please identify if the source is a major PSD source so that the reader may ascertain whether the modification is a modification to a major source.
- b. Assuming the source is a major PSD source, or if not, to ascertain whether the modification itself is a major source, Step One to the NSR applicability determination must be delineated. The Baseline Period must be identified (January 2014 through December 2015?) BAE for all affected units must be included.
- c. Please provide the calculations used that show the emissions for all NSR regulated pollutants, including PM<sub>2.5</sub> and excluding VOCs, associated with the BAE and the new PTE limits. (See above comment regarding PTE compared to PAE)
- d. Please show how the increase from the project is determined, i.e., PTE minus Baseline Actual Emissions (BAE). Without this information, the PSD NSR analysis is incomplete and the submission to EPA is incomplete.

3. CAM – The review memo states that CAM does not apply because the emissions controlled by the flares do not have an emissions standard.

- a. Flare C02 - Condition #001 to Sources 102a and b in the title V permit specify VOC emissions limits, so the above statement is not correct. The flare is a control device

as defined in 40 CFR 64.1. This assertion, even if correct, is not one of the exemptions found at 40 CFR 64.2(b).

- b. Flare C100 – The review memo should state, in the CAM discussion, that the applicability of CAM to the Sunoco flare should be addressed in the DNREC permit. From looking at the DNREC permit, one might conclude that the flare is exempt from CAM because the flare is subject to MACT and NSPS requirements.
4. The project –
  - a. The permit map is not included in the draft permit and should be, as the map would show which units have controls and how emissions are directed via stacks.
  - b. Because downstream (flares) and upstream (boilers) are affected by the project, we expect that the permits for SPMT in Delaware as well as FPL would be modified. We previously advised that the steam demand is not part of the project because the Braskem facility is not aggregated with FPL. Please note this in the review memo. Also please note, in the review memo, whether DNREC has been informed about this project and whether the FPL permit is being modified accordingly.
5. PM<sub>10</sub> and PM<sub>2.5</sub> emissions - Please explain the purpose of and basis for the proposed PM<sub>10</sub> emissions limits. Why are PM<sub>10</sub> Limits proposed but not PM<sub>2.5</sub> limits? Depending on the purpose of these limits, a means of assuring compliance with the limits may need to be specified in the plan approval.
6. VOC emissions - We note that the current VOC caps on the production lines in Plants 1 and 2 are not changed. We also note that the current permit allows ***The permittee shall calculate the VOC emissions on a monthly basis and 12 month rolling sum, using DEP approved methods.*** The methods to assure compliance with the various VOC caps for this facility must be specified in order to make this permit enforceable as a practical matter, i.e., to confirm that the source remains in compliance with the VOC caps.
7. HAP emissions – Please identify the HAP PTE, after the proposed change, in the review memo. If this change affects its current minor HAP status, affected applicable MACT requirements should be fully addressed.
8. The same production limits on plants 1 and 2 are stated in various conditions, including Condition #2 on pages 11, 14 and 18 and Condition #3 on pages 12, 16 and 20. We recommend that the throughput limit should be set forth once, perhaps in Section C, for brevity/clarity.

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